

Frequently Asked Questions about the Draft Institutional Controls Data Standard

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The questions and answers are arranged in three categories:

- General
- Implementation of the Data Standard
- Use of Data Standard

General:

Q1: How are institutional controls defined in the context of this draft data standard?

A1: Institutional controls are non-engineered instruments such as administrative and/or legal controls that minimize the potential for human exposure to contamination by limiting land or resource use. Institutional controls are used for two primary purposes: to minimize the potential for exposure to contaminants and/or to protect the integrity of a remedy. There are four general categories of institutional controls. These are:

Governmental Controls—Governmental controls are usually implemented and enforced by a State or Local government and can include zoning restrictions, ordinances, statutes, building permits, or other provisions that restrict land or resource use at a site. Local governments have a variety of land use control measures available from simple use restrictions to more sophisticated measures such as planned unit development zoning districts and overlay zones.

Proprietary Controls—Controls, such as easements and covenants, have their basis in real property law and are unique in that they generally create legal property interests. In other words, proprietary controls involve legal instruments placed in the chain of title of the site or property. An example of this type of control is an easement that provides access rights to a property so the Potentially Responsible Party (PRP), facility owner/operator, or regulatory agency may inspect and monitor a groundwater pump-and-treat system or cover system.

Enforcement and Permit Tools with IC Components—Enforcement and permit tools can be used to compel the land owner to limit certain site activities at both Federal and private sites. EPA or a State can enforce permits, conditions and/or issue orders.

Informational Devices—Informational tools provide information or notification that residual or capped contamination may remain on site. Common examples include State registries of contaminated properties, deed notices, and advisories.

(see <http://www.epa.gov/superfund/action/ic/guide/index.htm> for more details)

Q2: What is the scope of the IC Data Standard?

A2: The institutional control data standard will apply to any institutional control that is tracked and electronically managed by EPA, State, Tribal, or other desiring or interested entities. Institutional controls are generally imposed for cleanup actions when waste is

left behind and the site cannot support unlimited use and unrestricted exposure. For example, a permit that is required for drilling drinking water wells where residual contamination remains in an aquifer is an institutional control. However, an ongoing advisory, such as a pesticides advisory, is not the sort of information intended to be addressed by institutional controls. However, other program areas or database systems related to institutional controls may implement or use the standard if they believe it will facilitate information transfer. The EDSC will consider broadening the standard if findings from this review show that to be appropriate.

Q3: What was the business need for developing this draft data standard?

A3: Site cleanups often leave behind some amount of waste material that continues to pose a health risk. The management of sites throughout the cleanup process often involves the use of a suite of tools called institutional controls. While EPA may call for institutional controls in decision documents, State, Tribal, and Local governments are typically the implementers of institutional controls because they hold the legal and administrative responsibilities. EPA, other Federal agencies, responsible parties, private companies, and State, Tribal, and Local governments all share the responsibility for ensuring that institutional controls will be durable and effective. The draft Institutional Controls Data Standard is important to facilitate consistent communications among these different partners by properly integrating the relevant information concerning a particular site. Sharing this information should allow partners to assess the extent to which current institutional controls are appropriately implemented, monitored, and enforced.

Q4: Why was this draft standard developed?

A4: The EPA Office of Solid Waste and Emergency Response (OSWER) has taken a lead role in facilitating consistency with the community that needs to have access to and use of institutional control information. It has also committed to developing the Institutional Controls Tracking System and adding formality to the information they want to collect and share. EDSC review and approval of standards offers that recognition between EPA and State partners. EDSC assisted and guided OSWER in developing this data standard for vetting and approval; however, EDSC believes that the standard might apply to programs outside of OSWER that track institutional controls and related information. Thus, an important part of the vetting process will be to explore applicability across programs and whether harmonization of the data elements in the proposed standard with other existing institutional controls systems should occur. The decision to develop or adopt data standards, including this data standard, was made jointly by US EPA, States, and Tribes (through the Environmental Council of the States (ECOS), an organization that represents the heads of the State environmental agencies, Tribal environmental entities, and US EPA).

Q5: How are events represented in the Institutional Controls Data Standard?

A5: When developing the Institutional Control Data Standard, it was recognized that events should be captured as part of the standard. While events are not unique to institutional controls, we did not believe that events should be developed into a stand-alone data

standard. As a stand-alone data standard, we found that it was difficult to define an event broadly enough to include the activities that are needed for institutional controls, while not being too broad that it captures any possible activity occurring in the Exchange Network. To avoid confusion, we are incorporating event into the IC data standard, but we are also ensuring that the event data elements can be reused by assigning names and XML tag names that are not IC specific.

Q6: Why do some of the data elements in the standard have an “IC” prefix, while others do not?

A6: A data standard data element should have a name and definition that applies broadly where possible. However, it is important to be cognizant of using names that may have different meanings in different programs. For example, the IC data standard contains the term “IC Objective Name,” which is defined as “the name assigned to the intended goal of an IC.” This definition is too restrictive for use in other exchanges where “objective name” may have broader meaning, and therefore, IC was included in the term to denote its specific meaning.

Q7: What is a data standard?

A7: A “data standard” is a documented agreement among organizations that share or exchange data, including representation, formats, and definitions for such data. The data standard provides a common vocabulary to be used by US EPA, States, Tribes, and other partners. The data standard is a list of data elements, data element definitions, formats and Extensible Markup Language (XML) tags. Data elements are grouped into blocks of elements that are commonly used together. For example, the data elements used to describe address: street number, town, state, zip code are grouped together in an address block.

Implementation of the Data Standard:

Q8: My program currently uses all final and approved EDSC data standards. How will the IC data standard affect my implementation of the current standards?

A8: The IC data standard incorporates relevant standards by reference. The following standards are referenced, but not changed, by the IC data standard: Facility Identification, Latitude/Longitude, Contact Information, Chemical Identification, and Bibliographic (draft).

Q9: Is my Agency (or my program) required to use these data standards?

A9: No. State, Tribal, and Local government agencies or programs are not required to adopt or use these data standards, or to incorporate it into that agency’s or program’s own data flows. However, once US EPA and State agencies adopt and begin implementing the data standard, it will likely become the specified “road map” for communications among environmental agencies exchanging environmental information.

Q10: If my program or agency decides to implement these data standards, must it begin collecting information for every data element?

A10: No. These data standards provide a range of data elements that may be of interest to programs and agencies. Programs or agencies may collect information for one or more of the data elements but there is no requirement that any program or agency collect information for all data elements.

Q11: When will these draft data standards be approved by EDSC?

A11: Due to the potential for overlap of this draft standard with related programs, the EDSC is providing a 60-day day technical review. The EDSC will then review and resolve the comments, and publish the draft standard in the *Federal Register* for a 45-day public comment period.

Q12: Can some programs within a State, Tribal, or Local government follow this data standard, while others do not?

A12: Use of this Data Standard is not required, although over time it may become the standard for sharing or exchanging data with US EPA national data flows as well as between State agencies. State, Tribal, or Local government programs – especially those that do not exchange data with US EPA, other Federal agencies or agencies in other States – are certainly not obliged to adopt or work within this data standard. The standards that have been approved or are being considered are intended in the joint State/Tribal/US EPA context specifically for data exchange purposes.

Q13: I am in a State, Tribal, or Local government agency. My program doesn't use the same data elements as are used in this data standard. Is there an expectation that we will change our data elements?

A13: No. The data standard uses terminology intended for data *exchange* and is applicable only after the data you send crosses the threshold of your organization. Data that is exchanged will need to map to existing data holdings or conform in definition, meaning, and format to the Standard.

Q14: My US EPA program doesn't use the data elements as are used in this data standard. Is there an expectation that we will change our own data elements?

A14: Although the data standard is intended for use in data exchange, it is expected that US EPA programs will, as necessary (and over time), modify the data elements that they currently collect to conform to the data elements and terms in this data standard. The schedule for these changes is normally three years, with possible waivers in consideration of system modernization and update schedules.

Q15: Is this data standard the basis for a new data system design? Will we have to change our existing data system to conform to it?

A15: The answer for State, Tribal, and Local government agencies is no. This data standard is more like a dictionary to help translate or exchange data from any one data system to any

other. Use of this data standard does not require any non-US EPA agency or program to change its current data system. When data is exchanged from one system to another, this data standard will provide the necessary information to ensure that data from a given field in the sending system is mapped to the correct location in the receiving system. Local system designers may, once they choose to use this data standard for data exchange, elect to modify their system (perhaps in the context of a previously planned system modernization) in order to create the capability of exchanging data that conforms with these standards. US EPA will be using the data standard as its own data systems are modified and updated.

Q16: We are planning to update (one or more of) our current data system(s). How can this data standard be of help to us in this effort?

A16: This data standard provides guidance to programs and agencies on naming conventions for Federal agencies and Federal Facilities and permissible values. By using this information, you can update your system(s) so that it is in conformance with the standard thus facilitating data exchange between your system(s) and other systems that collect the same data elements.

Q17: Are there any Federal funds available to help States, Tribes, or Local government agencies that implement Federal programs if they choose to update their systems to enable them to communicate more easily using the Standard?

A17: Yes, although such funding is not linked directly to this data standard development effort. US EPA has and will continue to provide grant funding to assist other levels of government that implement Federal environmental programs. Such assistance has often been used by grantees to help develop and update data management systems.

Q18: What does this standard have to do with Environmental Information Exchange Network I keep hearing about? And I thought everything was supposed to be in XML – is this XML?

A18: The Network concept relies upon common “Data Exchange Templates” (DETs) or schema expressed in Extensible Markup Language (XML). The data standard would be used as the starting point or “core” for schema related to institutional controls. The XML tags names standardized here would be incorporated into the XML schema.

Use of Data Standard:

Q19: Who will use this data standard?

A19: All Federal, State, Tribal and Local government agencies involved in the tracking of institutional control activities are encouraged to use this standard when and if they share or exchange data with other partners. We also expect that responsible parties will use this standard for the reporting of data to EPA and that companies that manage site data for State and Local governments will use these standards. All parties tracking institutional controls are encouraged to use the standard as a tool if they are planning to update or enhance their own existing data systems.

Q20: Will US EPA be issuing rules for use of this data standard?

A20: No, at least not in the sense of issuing formal regulations to be used by everyone. EPA will develop business rules for using the data standard that applies to EPA's use. These may then be implemented through program-specific agreements with State and Local agencies, enforcement agreements with responsible parties, and other vehicles. Information on the standard will be available through the EDSC website (www.envdatastandards.net) and the Environmental Data Registry (www.epa.gov/edr).

Q21: Will this data standard be open for revision in the future? How will the standard be maintained?

A21: Yes. There is every reason to expect that adjustments or revisions will be necessary in the future as new or existing programs or agencies determine the need to collect additional data elements not provided on this list or refining those included in the standard once it has been in place. The EDSC is in the process of developing a Versioning Policy that will assist users in transitioning from one version of a data standard to another.